

exhibits cellular infiltration in at least one of the following: lung, pancreas, stomach or liver.

40. (New) The targeting construct of claim 39, wherein the targeting construct further comprises a screening marker.

41. (New) A cell transformed with the targeting construct of claim 39.

42. (New) A method of producing a targeting construct for a lymphoid-specific GPCR gene, the method comprising:

(a) obtaining a first polynucleotide sequence homologous to a first region of a lymphoid-specific GPCR gene;

(b) obtaining a second polynucleotide sequence homologous to a second region of a lymphoid-specific GPCR gene;

(c) providing a vector comprising a selectable marker; and

(d) inserting the first and second polynucleotide sequences into the vector, to produce the targeting construct,

wherein the selectable marker is located between the first and second polynucleotide sequences, and wherein the targeting construct, when introduced into murine embryonic stem cells, results in a transgenic mouse having a disruption in a lymphoid-specific GPCR gene, wherein the transgenic mouse, when homozygous for the disruption in the lymphoid-specific GPCR gene, exhibits cellular infiltration in at least one of the following: lung, pancreas, stomach or liver.

43. (New) A method of producing a targeting construct for a lymphoid-specific GPCR gene, the method comprising:

(a) providing a polynucleotide sequence homologous to a lymphoid-specific GPCR gene;

(b) generating two different fragments of the polynucleotide sequence;

(c) providing a vector having a gene encoding a selectable marker; and

(d) inserting the two different fragments into the vector to form the targeting construct,

wherein the selectable marker is located between the two different fragments, and

wherein the targeting construct, when introduced into murine embryonic stem cells, results in a transgenic mouse having a disruption in a lymphoid-specific GPCR gene, wherein the transgenic

mouse, when homozygous for the disruption in the lymphoid-specific GPCR gene, exhibits cellular infiltration in at least one of the following: lung, pancreas, stomach or liver.

44. (New) A method of producing a transgenic mouse comprising a homozygous disruption in a lymphoid-specific GPCR gene, the method comprising:

(a) providing a mouse embryonic stem cell comprising a disrupted lymphoid-specific GPCR gene;

(b) introducing the mouse embryonic stem cell into a pseudopregnant mouse, wherein said pseudopregnant mouse gives birth to a chimeric mouse; and

(c) breeding the chimeric mouse to produce the transgenic mouse,

wherein the transgenic mouse, when homozygous for a disruption in a lymphoid-specific GPCR gene, exhibits cellular infiltration in at least one of the following: lung, pancreas, stomach or liver.

45. (New) A transgenic mouse comprising a homozygous disruption in a lymphoid-specific GPCR gene, wherein the transgenic mouse exhibits cellular infiltration in the lung.

46. (New) The transgenic mouse of claim 45, wherein the cellular infiltration comprises lymphocytes.

47. (New) A transgenic mouse comprising a homozygous disruption in a lymphoid-specific GPCR gene, wherein the transgenic mouse exhibits cellular infiltration in the pancreas.

48. (New) The transgenic mouse of claim 47, wherein the cellular infiltration comprises lymphocytes.

49. (New) A transgenic mouse comprising a homozygous disruption in a lymphoid-specific GPCR gene, wherein the transgenic mouse exhibits cellular infiltration in the stomach.

50. (New) The transgenic mouse of claim 49, wherein the cellular infiltration comprises lymphocytes.

51. (New) The transgenic mouse of claim 49, wherein the cellular infiltration comprises granulocytes.

52. (New) The transgenic mouse of claim 49, wherein the cellular infiltration comprises plasma cells.

53. (New) A transgenic mouse comprising a homozygous disruption in a lymphoid-specific GPCR gene, wherein the transgenic mouse exhibits cellular infiltration in the liver.

54. (New) The transgenic mouse of claim 53, wherein the cellular infiltration comprises lymphocytes.

55. (New) A cell or tissue isolated from the transgenic mouse of claim 45, 47, 49 or 53.

56. (New) A method of producing a transgenic mouse comprising a homozygous disruption in a lymphoid-specific GPCR gene, wherein the transgenic mouse exhibits cellular infiltration in at least one of the following: lung, pancreas, stomach or liver, the method comprising:

- (a) introducing a lymphoid-specific GPCR gene targeting construct into a cell;
- (b) introducing the cell into a blastocyst;
- (c) implanting the resulting blastocyst into a pseudopregnant mouse, wherein said pseudopregnant mouse gives birth to a chimeric mouse; and
- (d) breeding the chimeric mouse to produce the transgenic mouse comprising a disruption in a lymphoid-specific GPCR gene.

57. (New) A transgenic mouse comprising a heterozygous disruption in a lymphoid-specific GPCR gene, wherein, upon breeding, produces a transgenic mouse homozygous for a disruption in a lymphoid-specific GPCR gene exhibiting cellular infiltration in at least one of the following: lung, pancreas, stomach or liver.

58. (New) A cell or tissue isolated from the transgenic mouse of claim 57.